

CLAIMS

1. Vessel for exploration of hydrocarbons, comprising one or more risers extending from the vessel to the sea bed, a hydrocarbon processing unit connected to the one or 5 more risers and to a storage or transport structure for storing or transporting of the processed hydrocarbons, characterized in that, the vessel is anchored to the seabed, the vessel comprising a lifting means for lowering risers vertically towards the sea bed and for connecting a riser with a first end to a subsea hydrocarbon structure, which riser comprises a connector on a second end, the vessel comprising a connector for attaching 10 to the riser connector and for placing the riser in fluid connection with the processing unit.
2. Vessel according to claim 1, the storage structure comprising a tank on the vessel.
- 15 3. Vessel according to claim 1 or 2, wherein the means for lowering comprise a crane, placed on the vessel.
4. Vessel according to claim 1, 2 or 3, the risers extending alongside of the vessel.
- 20 5. Vessel according to claim 1, 2, 3 or 4, wherein the vessel comprises a derrick and a drill string extending from the derrick to the seabed.
6. Vessel according to claim 5, wherein the drill string extends through a shaft in the vessel.
- 25 7. Vessel according to any of the preceding claims, the riser comprising a lower part being made of a rigid material and being connected to a submerged buoy, an upper part of the riser being made of a flexible material and extending from the buoy to the vessel.
- 30 8. Vessel according to any of the preceding claims, the vessel comprising a shaft extending from deck level to keel level, the lifting means being located near the shaft for lowering a riser through the shaft towards the sea bed.

9. Method of installing a number of risers between a floating vessel and the sea bed, the vessel comprising a hydrocarbon processing unit connected to the one or more risers and a storage or transport structure for storing or transporting of the processed hydrocarbons, the vessel being anchored to the sea bed, characterized in that, the vessel

5 comprises a lifting means for lowering risers vertically towards the sea bed and for connecting a riser with a first end to a subsea hydrocarbon structure, and a connector means on a second end of the riser and on the vessel for placing the riser in fluid connection with the processing unit, the method comprising the steps of

- lowering the first riser part from the lifting means,
- 10 - connecting an upper end of the riser to a buoyancy device,
- lowering the riser and buoyancy device,
- connecting the lower end of the first riser part to a subsea structure with a remote operated vehicle,
- releasing the buoyancy device from the lifting means,
- 15 - lowering the flexible riser part from the lifting device
- connecting the lower part of the flexible riser part to the buoyancy device, in fluid communication with the lower riser part, and the upper end of the flexible riser part to the processing unit.

20 10. Method according to claim 9, wherein prior to lowering the first riser part,

- a connector base is lowered to the seabed at a distance from a distribution member,
- a transverse pipe section is lowered to the distribution member, and is attached thereto,
- 25 - the vessel is moved sideways to extend the transverse pipe section over the seabed from the distribution member to the connector base,
- the transverse pipe section is connected to the connector base.

30 11. Method according to claim 8 or 9, wherein the lower end of the flexible riser part is lowered from a second vessel alongside the vessel.

12. Method according to claim 8 or 9, wherein the lower riser part and the buoyancy device are lowered from a second vessel alongside the vessel.

13. Method according to claim 11, wherein the lower riser part is attached to the connector base and the second vessel is displaced sideways to extend the lower riser part at least partially horizontally over the seabed.